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**PATENT**  
Atty. Docket No. 31045-101

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

JOHN C. S. KOO

Serial No.: 10/613,741

Filed: July 3, 2003

For: SHOE HAVING A CONTOURED BOTTOM  
WITH SMALL PARTICLES BONDED TO  
THE LOWEST EXTENDING PORTIONS  
THEREOF

Group Art Unit: 3728

Examiner: Jila M. Mohandesi

Conf. No.: 5633

**APPEAL BRIEF**  
**ON APPEAL TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Mail Stop Appeal Brief - Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Appellant in the above-captioned patent application appeals the final rejection of claims 1-36 set forth in the Office Action mailed September 27, 2007, a Notice of Appeal having been timely filed on December 26, 2007.

### **I. REAL PARTY IN INTEREST**

The real party in interest in this application is Dynasty Footwear, Ltd., pursuant to an assignment recorded on July 3, 2003, at reel 014270, frame 0109.

### **II. RELATED APPEALS AND INTERFERENCES**

Appellant previously appealed in this application, filing a Notice of Appeal on November 27, 2006 and the Appeal Brief on January 24, 2007. Rather than filing an Answer, the Examiner reopened prosecution by issuing an Office Action on May 21, 2007, and then making that rejection final in the Office Action dated September 27, 2007, from which the present appeal is taken.

### **III. STATUS OF CLAIMS**

Claims 1-36 have been finally rejected and are the subject matter of this appeal. In accordance with 37 C.F.R. § 1.192(c)(9), a copy of the claims involved in this appeal is included in the Claims Appendix attached hereto.

### **IV. STATUS OF THE AMENDMENTS**

No amendment has been filed subsequent to the final rejection.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention concerns a shoe having a plurality of indentations on its bottom surface, with lower extending and/or ground-contacting portions between the indentations. An example of such a structure is set forth in original Figure 4, which shows the cross-section of a portion of a shoe's insole and outsole, having indentations

52 and lower extending, ground-contacting portions 54 between them. Also see, e.g., page 12 line 24 through page 13 line 2 of the Specification.

Generally speaking, according to the present invention, small particles are bonded differentially to different areas of the bottom surface, based on whether an area is a lower extending and/or ground-contacting portion, on the one hand, or an indentation, on the other, with an emphasis toward coating lower extending and/or ground-contacting portions. See, e.g., revised Figure 4 and page 12 line 24 through page 13 line 2 of the Specification. In one representative embodiment, the small particles are fabric fibers that have been flocked onto the bottom surface of the shoe. See, e.g., page 8 line 16 through page 14 line 4 of the Specification.

A technique for achieving this configuration is described, e.g., at page 12 line 24 through page 13 line 12 of the Specification, with reference to Figure 4 thereof. In one representative embodiment, at least some of the lower extending and/or ground-contacting portions have a plurality of small particles bonded to them, but each of the plurality of indentations is predominantly uncoated with such small particles. *Id.* In another embodiment, only the lower extending and/or ground-contacting portions of the shoe's bottom surface are coated. See, e.g., page 12 lines 20-23.

One advantage of these configurations is that if and when the flocking or other particles eventually wear away, the entire bottom surface of the shoe often will have a more uniform appearance than if the entire bottom surface of the shoe were coated. The reason is that it ordinarily would be very difficult or impossible for the particles adhering to the surface within the indentations to wear away at the same rate as the

particles on the lower extending and/or ground-contacting portions. See, e.g., page 13 lines 6-12 and 25-28 of the Specification.

Thus, independent claim 1 is directed to a shoe in which the bottom surface, which is adjacent to the ground in normal use, has a plurality of indentations, with lower extending portions between such indentations. An example is depicted in Figure 4, which shows the cross-section of a portion of a shoe's insole and outsole, having indentations 52 and lower extending portions 54 between them. Also see, e.g., page 12 line 24 through page 13 line 12 of the Specification. A sole forms at least a portion of the bottom surface, and an upper portion extends above the sole. See, e.g., page 9 lines 2-4. A plurality of small particles is bonded to at least some of the lower extending portions (e.g., portions 54), but each of the plurality of indentations (e.g., indentations 52) is predominantly uncoated with such small particles. See, e.g., page 12 line 24 through page 13 line 12 of the Specification and revised Figure 4.

Independent claim 30 is directed to a shoe in which a bottom surface that is adjacent to the ground in normal use has a plurality of indentations, with ground-contacting portions between the indentations. See, e.g., Figure 4 and page 12 line 24 through page 13 line 12 of the Specification. A sole forms at least a portion of the bottom surface, and an upper portion extends above the sole. See, e.g., page 9 lines 2-4 of the Specification. A plurality of small particles is bonded differentially to different areas of the bottom surface, with each of a plurality of the ground-contacting portions being coated more than each of the plurality of indentations. See, e.g., page 12 line 24 through page 13 line 12 of the Specification.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-8, 10-20 and 24-36 stand rejected under 35 USC § 103(a) over U.S. Patent 4,658,514 (Shin) in view of U.S. Patent 2,793,136 (Root); claim 9 stands rejected under § 103(a) over Shin in view of Root and U.S. Patent 4,779,360 (Bible); and claims 21-23 stand rejected under § 103(a) over Shin in view of Root and U.S. Patent 5,276,981 (Schaffer).

## **VII. ARGUMENT**

### **Authority Pertaining to Issues on Appeal**

#### **Obviousness Rejections Under 35 USC § 103**

The Supreme Court has set forth the following general standard with respect to any determination of obviousness:

“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.”

*Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966), quoted approvingly by *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (U.S. 2007).

When performing this analysis, all claim limitations must be considered. See, e.g., MPEP § 2143.01. At the same time, the analysis requires a determination as to whether the claimed invention “as a whole” would have been obvious just before the

claimed invention was made to person of ordinary skill in the art. See, e.g., MPEP § 2142.

It is noted that, “rejections on obviousness cannot be sustained with mere conclusory statements...” MPEP § 2142, quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), which in turn was quoted approvingly by the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007). In addition, “impermissible hindsight must be avoided and the legal conclusion [regarding obviousness] must be reached on the basis of the *facts* gleaned from the prior art [emphasis added].” MPEP § 2142.

More specifically, “the examiner must provide *evidence* which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a *prima facie* case of obviousness) is more probable than not [emphasis added].” MPEP § 2142.

Finally, even where all of a claim’s limitations can be found in the prior art, the examiner must provide a convincing reason as to why one of ordinary skill in the art would have been prompted to combine such limitations in the same manner as recited in claim.

“Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.”

*KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007).

**Rejection Under § 103(a) over Shin in view of Root**

Claims 1-5, 10-20, 24-32, 34 and 36

Independent claim 1 is directed to a shoe in which the bottom surface, which is adjacent to the ground in normal use, has a plurality of indentations, with lower extending portions between such indentations. A sole forms at least a portion of the bottom surface, and an upper portion extends above the sole. A plurality of small particles is bonded to at least some of the lower extending portions, but each of the plurality of indentations is predominantly uncoated with such small particles.

The foregoing combination of features is not disclosed or suggested by the applied art. For example, no permissible combination of Shin and Root would have disclosed or suggested a configuration that includes indentations separated by lower extending portions, in which small particles are bonded to at least some of the lower extending portions but the indentations are predominantly uncoated.

Independent claim 30 is directed to a shoe in which a bottom surface that is adjacent to the ground in normal use has a plurality of indentations, with ground-contacting portions between the indentations. A sole forms at least a portion of the bottom surface, and an upper portion extends above the sole. A plurality of small particles is bonded differentially to different areas of the bottom surface, with each of a plurality of the ground-contacting portions being coated more than each of the plurality of indentations.

The foregoing combination of features is not disclosed or suggested by the applied art. For example, no permissible combination of Shin and Root discloses or suggests a shoe bottom-surface configuration having a plurality of indentations with

ground-contacting portions between the indentations, in which small particles are bonded differentially to different areas, with each of a plurality of ground-contacting portions being coated more than each of the plurality of indentations.

In this regard, Shin describes and illustrates a running shoe having a particular sole structure. See, e.g., Shin's Abstract. More specifically, Shin's design uses a plurality of parallel slots 50 cut into the ball of the outsole to increase flexibility at that portion of the sole's structure. See, e.g., Shin's Abstract and column 3 lines 65-68.

Shin's bar treads 76, which are the portions of Shin's sole between adjacent slots 50, are provided with ridges 78. Shin states that the purposes of such ridges 78 are twofold: (1) to maximize traction and (2) to provide a cushioning effect. See, e.g., column 3 line 68 through column 4 line 6 of Shin's disclosure.

As acknowledged by the Examiner, Shin does not say anything at all about the above-referenced features of the invention. In fact, Shin does not even say anything about bonding a plurality of small particles to any portion of the bottom surface of a shoe in any manner whatsoever. In order to make up for these deficiencies, the Examiner points to Root.

In this regard, Root concerns slip-resistant surfaces, as well as methods for manufacturing such surfaces. See, e.g., Root's title and column 1 lines 15-17 of Root. More specifically, Root's slip-resistant surfaces include a thick layer of a resin supporting matrix into which angular or rough resin granules have been embedded. See, e.g., column 1 lines 55-60. In order to achieve the desired slip resistance, "Portions of the granules extend well above the free surface of the matrix." See, e.g., column 1 lines 59-61 and Figures 1, 7 and 9 of Root.



Root's process is summarized at column 3 lines 1-8:

"The slip-resistant surface 10 of the present invention (see Fig. 1) may be formed on a variety of objects by coating or impregnating a surface 12 (see Fig. 2) with a relatively thick layer 14 of a fluid dispersion of finely divided resin particles in a liquid plasticizer and thereafter distributing angular or rough, plasticized or unplasticized resin granules 16 on or in the resin dispersion and heating the dispersion to solidify it."

Root repeatedly emphasizes that the fluid dispersion layer 14 should be relatively thick.

In one example, "The coating 28 was of sufficient thickness to impregnate the wool felt sole 18 to a depth of about 1/8 of an inch." See column 5 lines 41-43 of Root. In another embodiment, the layer was 3/16 inch thick. See column 5 lines 60-62 of Root.

The Examiner argues that it would have been obvious to replace the ridges on Shin's bar treads 76 with an anti-slip surface coating as described by Root (but, presumably, not to also coat Shin's slots 50 with such anti-slip surface coating). However, for at least the following reasons, Appellant does not believe that there would have been any motivation for one of ordinary skill in the art to modify Shin's shoe in this manner.

First, as noted above, Shin discloses a running shoe. For reasons of comfort, functionality and aesthetics, it is difficult to believe that one of ordinary skill in the art seriously would have considered coating any portion of the bottom of a running shoe with a layer of hard resin granules. Root shows only one example in which its anti-slip coating is applied to the bottom of a shoe (Figures 5, 6 and 8 of Root), and that shoe appears to be a work shoe or boot which does not appear to be suitable for running. Although a work shoe or boot might possibly benefit from the additional traction provided by Root's hard resin granules, it seems highly unlikely that a running shoe would.

Second, as already noted, Shin states that the ridges on its bar treads 76 have two purposes: (1) to maximize traction and (2) to provide a cushioning effect. Shin presumably is referring to traction on a wet surface in much the same way that a tire's treads provide traction, while Root's construction presumably provides traction when the protruding hard granules dig into a relatively soft surface. This difference in the kinds of traction provided means that Root's structure would not have been an obvious replacement for Shin's. Even more significantly, as to the second stated purpose of Shin's ridges, substituting Root's hard resin granules for Shin's ridges almost certainly would significantly *reduce*, rather than improving, the amount of *cushioning* provided by Shin's running shoe. In other words, on both counts Root's structure would have been a poor substitute for Shin's.

Third, the application of Root's anti-slip surface would require several additional manufacturing steps, including selectively applying Root's dispersion matrix with embedded granules to Shin's bar treads, but not to its slots, and then curing the mixture after such application. On the other hand, Shin's approach of providing bar treads having ridges on a shoe's sole typically can be accomplished by properly configuring the outsole's injection mold (i.e., with no additional manufacturing step).

Fourth, as noted above, Root's process requires a relatively thick layer of fluid dispersion (e.g., at least 1/8 inch thick). The required thickness of this layer almost certainly makes it impossible, or at least highly impractical, to differentially apply such suspended particles to the bottom of Shin's running shoe in the manner asserted in the Office Action. That is, with such a thick coating, it almost certainly would be impossible to coat Shin's bar treads 76 but avoid coating its slots 50.

Fifth, it is unclear how well Root's mixture would adhere to Shin's relatively narrow bar treads. There is simply no evidence to indicate that such an application would work as a practical matter.

Based on these considerations, it is difficult to believe that one of ordinary skill in the art would have even considered making the substitution argued by the Examiner. As indicated above, such a substitution would have significantly increased manufacturing costs while resulting in a structure that is significantly less suitable for Shin's stated purposes.

Accordingly, Appellant believes that there would have been absolutely no motivation for one of ordinary skill in the art to combine Shin with Root in the manner argued by the Examiner. Appellant previously raised most of these points, but the Examiner has yet to respond to them. Instead, the Examiner simply argues,

"A combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results [citation omitted]. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability [citation omitted]."

and

"[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill [citation omitted]. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results [citation omitted]."

However, the foregoing general statements are not at all applicable to the present situation. With respect to the first quotation, Appellant's remarks (presented above) make clear that the referenced "predictable results" of the combination argued by the Examiner would be to increase manufacturing costs while simultaneously

resulting in a product that is almost certainly commercially unacceptable. Similarly, the Examiner has not explained what “market forces” would have prompted one of ordinary skill in the art to replace Shin’s groove construction with Root’s thick layer of dispersion matrix having embedded hard resin granules, particularly given that such a layer would have to be carefully applied to only selected areas on the bottom of the outsole for a running shoe.

With respect to the second quotation set forth above, there is no indication that the combination argued by the Examiner would “improve” Shin’s running shoe. Rather, as pointed out above, such a combination would result in a significantly worse and more expensive running shoe. Also, the Examiner’s comment that a “change in form or shape is . . . within the level of ordinary skill in the art” seems to be completely irrelevant to the present analysis.

In short, the Examiner has failed to point out even one practical consideration that would have motivated some of ordinary skill in the art to perform the argued substitution. To the contrary, all practical considerations would teach away from any such substitution.

For at least these reasons, independent claims 1 and 30, together with their dependent claims 2-5, 10-20, 24-29, 31, 32, 34 and 36, are believed to be allowable over the applied art.

#### Claims 6 and 35

Claim 6 ultimately depends from independent claim 1, and claim 35 ultimately depends from independent claim 30 (discussed above). Each recites the further limitation that the small particles comprise a fabric material and have been applied using

a flocking technique. This additional feature of the invention is not disclosed or suggested by the applied art.

With respect to it, the Examiner simply argues,

“ . . . the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. [Citation omitted]. A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.”

However, the Examiner has not even attempted to argue that application of Root's layer of resin supporting matrix, into which angular or rough resin granules are embedded, onto a surface would result in the same product as flocking fabric material onto the same surface. To the contrary, the Examiner's only mention of using fabric material is in reference to column 4, lines 49-51 of Root. That portion of Root mentions an alternate embodiment in which finely divided or fibrous fillers are included *within* the dispersion. Clearly, such an embodiment would not result in the same product as flocking fabric material onto a surface, as presently recited.

For these additional reasons, claims 6 and 35 are believed to be allowable over the applied art.

#### Claim 7

Claim 7 depends from independent claim 1 (discussed above) and recites the further limitation that the small particles comprise at least one of natural and synthetic leather. This additional feature of the invention is not disclosed or suggested by the applied art.

The Examiner argues,

“Root ‘156 [sic] discloses that a variety of particles can be used for forming the slip resistant surfaces. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to make the particles of the references as applied to claim 1 out of natural or synthetic leather, natural or synthetic rubber, or plastic as these materials are well known and used in the art for aiding in slip prevention.”

However, the assertion underlying this argument (i.e., that Root “discloses that a variety of particles can be used for forming the slip resistant surfaces”) does not appear to be correct. In fact, it appears that the only particles disclosed in Root are made from resin. Moreover, it appears to be important to Root’s structure that the particles and the matrix in which they are suspended both are made from resin. See, e.g., column 1 lines 56-60 of Root:

“In accordance with the present invention I have formed a new slip-resistant surfacing by anchoring angular or rough resin granules in antislip array in a tough resilient resin supporting matrix with which the granules are integrally united in an unusual relationship.”

and column 1 line 68 through column 2 line 2 of Root:

“In the special relationship in the present article no boundary remains between the resin of the granule and of the matrix and where the granules have greater or less hardness than the matrix there exist union strata in which the hardness progressively increases from the value of the resin body richer in plasticizer to that of the resin body poorer in or free, of plasticizer.”

In any event, neither Shin, Root nor any combination of the two teaches or suggests anything at all about differentially coating particles of natural and/or synthetic leather onto the sole of a shoe, in the manner presently recited.

For these additional reasons, claim 7 is believed to be allowable over the applied art.

Claim 8

Claim 8 depends from independent claim 1 (discussed above) and recites the further limitation that the small particles comprise at least one of natural and synthetic rubber. This additional feature of the invention is not disclosed or suggested by the applied art.

The Examiner argues,

“Root ‘156 [*sic*] discloses that a variety of particles can be used for forming the slip resistant surfaces. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to make the particles of the references as applied to claim 1 out of natural or synthetic leather, natural or synthetic rubber, or plastic as these materials are well known and used in the art for aiding in slip prevention.”

However, the assertion underlying this argument (i.e., that Root “discloses that a variety of particles can be used for forming the slip resistant surfaces”) does not appear to be correct. In fact, it appears that the only particles disclosed in Root are made from resin. Moreover, it appears to be important to Root’s structure that the particles and the matrix in which they are suspended both are made from resin. See, e.g., column 1 lines 56-60 of Root:

“In accordance with the present invention I have formed a new slip-resistant surfacing by anchoring angular or rough resin granules in antislip array in a tough resilient resin supporting matrix with which the granules are integrally united in an unusual relationship.”

and column 1 line 68 through column 2 line 2 of Root:

“In the special relationship in the present article no boundary remains between the resin of the granule and of the matrix and where the granules have greater or less hardness than the matrix there exist union strata in which the hardness progressively increases from the value of the resin body richer in plasticizer to that of the resin body poorer in or free, of plasticizer.”

In any event, neither Shin, Root nor any combination of the two teaches or suggests anything at all about differentially coating particles of natural and/or synthetic rubber onto the sole of a shoe, in the manner presently recited.

For these additional reasons, claim 8 is believed to be allowable over the applied art.

#### Claim 33

Claim 33 depends from independent claim 30 (discussed above) and recites the further limitation that the small particles are bonded to the different areas of the bottom surface using a backing sheet material. This additional feature of the invention is not disclosed or suggested by the applied art. In fact, the Examiner has not even argued that it is.

Accordingly, claim 33 is believed to be allowable over the applied art.

#### **Rejection Under § 103(a) over Shin in view of Root and Bible**

#### Claim 9

Claim 9 depends from independent claim 1 (discussed above) and recites the further limitation that the small particles comprise metal. This additional feature of the invention is not disclosed or suggested by the applied art.

The Examiner argues,

“Bible ‘360 teaches that grit material used to gain grip on slippery surfaces can be made of aluminum oxide, silicon carbide or tungsten carbide (i.e. metals) for their durability, less tendency to crumble and their hardness to scratch or furrow up metallic slippery surfaces. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to make the grit particles of Shin-Root as applied to claim 1 above out of metal, as taught by Bible ‘360, to aid in gaining grip on metallic or rough surfaces.”



However, this argument does not appear to be correct. First, it appears to be important to Root's structure that the particles and the matrix in which they are suspended both are made from resin. See, e.g., column 1 lines 56-60 of Root:

"In accordance with the present invention I have formed a new slip-resistant surfacing by anchoring angular or rough resin granules in antislip array in a tough resilient resin supporting matrix with which the granules are integrally united in an unusual relationship."

and column 1 line 68 through column 2 line 2 of Root:

"In the special relationship in the present article no boundary remains between the resin of the granule and of the matrix and where the granules have greater or less hardness than the matrix there exist union strata in which the hardness progressively increases from the value of the resin body richer in plasticizer to that of the resin body poorer in or free, of plasticizer."

Simply substituting the grit particles of Bible into Root's matrix likely would not have achieved the same result.

In addition, one of ordinary skill in the art would not have considered differentially coating grit particles of the type disclosed in Bible onto bar treads on the sole of a running shoe, in the manner presently recited, as an acceptable substitute for Shin's ridges.

For these additional reasons, claim 9 is believed to be allowable over the applied art.

### **Rejection Under § 103(a) over Shin in view of Root and Schaffer**

#### Claim 21

Claim 21 depends from independent claim 1 (discussed above) and recites the further limitation that the small particles are bonded using a temporary adhesive that

allows the particles to wear off during normal outdoor use. This additional feature of the invention is not disclosed or suggested by the applied art.

The Examiner argues,

“Schaffer et al. ‘981 teaches that the material for particles attached to the bottom of shoe soles to aid in gaining traction can be modified to wear over given time frames, including weeks (see col. 2, lines 3-21). Therefore, it would have been well within the skill of one of ordinary skill in the art, to modify the material of the particles attached to the sole of Shin-Root as applied to claim 1 above to last over any time period desired, as taught by Schaffer et al. ‘981, to determine the wear life of the sole of the shoe.”

However, the portion (col. 2, lines 3-21) of Schaffer cited by the Examiner actually describes the use of particles for creating a material for use on a shoe’s sole that will be *more* wear-resistant.

In addition, the motivation argued by the Examiner for modifying the proposed combination of Shin and Root (i.e., “to determine the wear life of the sole of the shoe”) is unclear to Appellant. To the contrary, it would seem to Appellant that use of a temporary adhesive would have defeated the goal that Root is trying to achieve, i.e., resistance to slipping.

For these additional reasons, claim 21 is believed to be allowable over the applied art.

#### Claim 22

Claim 22 depends from claim 21 (discussed above) and recites the further limitation that the temporary adhesive allows the particles to wear off within no more than 3 days when worn outdoors in an urban environment on a full-time basis. This additional feature of the invention is not disclosed or suggested by the applied art. In

fact, the Examiner is even argued that this feature of the invention is disclosed or suggested by the applied art.

Accordingly, claim 22 is believed to be allowable over the applied art.

#### Claim 23

Claim 23 depends from claim 21 (discussed above) and recites the further limitation that the temporary adhesive allows the particles to wear off within no more than 3 weeks when worn outdoors in an urban environment on a full-time basis. This additional feature of the invention is not disclosed or suggested by the applied art. In fact, the Examiner is even argued that this feature of the invention is disclosed or suggested by the applied art.

Accordingly, claim 23 is believed to be allowable over the applied art.

### **VIII. CONCLUDING REMARKS**

As Appellant has shown above, for a number of reasons, nothing in the cited references discloses, teaches, or suggests the invention recited by the claims on appeal. Appellant therefore respectfully submits that the claimed invention is patentably distinct over the applied art.

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In view of the foregoing remarks, Appellant respectfully requests that the rejection of claims 1-36 be reversed and a Notice of Allowance issued.

Respectfully submitted,

**JOSEPH G. SWAN, A PROFESSIONAL CORP.**

Dated: February 18, 2008

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**CLAIMS APPENDIX**

Claims on Appeal

1. A shoe comprising:
  - (a) a bottom surface that is adjacent to the ground in normal use and that has a plurality of indentations, with lower extending portions between the indentations;
  - (b) a sole that forms at least a portion of the bottom surface;
  - (c) an upper portion extending above the sole; and
  - (d) a plurality of small particles bonded to at least some of the lower extending portions, but wherein each of the plurality of indentations is predominantly uncoated with said small particles.
2. A shoe according to claim 1, wherein at least 1,000 small particles are bonded to the at least some of the lower extending portions.
3. A shoe according to claim 1, wherein the small particles are bonded to the at least some of the lower extending portions using adhesive material.
4. A shoe according to claim 1, wherein the small particles are bonded to the at least some of the lower extending portions by embedding the small particles directly into said bottom surface using at least one of heat and pressure.

5. A shoe according to claim 1, wherein the small particles comprise a fabric material.

6. A shoe according to claim 5, wherein the fabric particles have been applied using a flocking technique.

7. A shoe according to claim 1, wherein the small particles comprise at least one of natural and synthetic leather.

8. A shoe according to claim 1, wherein the small particles comprise at least one of natural and synthetic rubber.

9. A shoe according to claim 1, wherein the small particles comprise metal.

10. A shoe according to claim 1, wherein the small particles comprise plastic.

11. A shoe according to claim 1, wherein the small particles have been bonded directly onto the at least some of the lower extending portions.

12. A shoe according to claim 1, wherein the sole is sufficiently durable for commercially acceptable outdoor use.

13. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D624 tear resistance of at least 6 kilograms per centimeter.

14. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D624 tear resistance of at least 9 kilograms per centimeter.

15. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D624 tear resistance of at least 15 kilograms per centimeter.

16. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D1630(NBS) abrasion resistance of at least 25%.

17. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D1630(NBS) abrasion resistance of at least 35%.

18. A shoe according to claim 1, wherein the sole includes an outsole having an ASTM-D1630(NBS) abrasion resistance of at least 45%.

19. A shoe according to claim 1, wherein the sole includes an outsole that is comprised of at least one of leather, natural rubber and synthetic rubber.

20. A shoe according to claim 1, wherein with the small particles cover at least 50% of the portion of the bottom surface that normally comes into contact with the ground.

21. A shoe according to claim 1, wherein the small particles are bonded using a temporary adhesive that allows the particles to wear off during normal outdoor use.

22. A shoe according to claim 21, wherein the temporary adhesive allows the particles to wear off within no more than 3 days when worn outdoors in an urban environment on a full-time basis.

23. A shoe according to claim 21, wherein the temporary adhesive allows the particles to wear off within no more than 3 weeks when worn outdoors in an urban environment on a full-time basis.

24. A shoe according to claim 1, wherein the sole is sufficiently strong for commercially acceptable outdoor use.

25. A shoe according to claim 1, wherein the bottom surface has at least five of said indentations.

26. A shoe according to claim 1, wherein at least some of said indentations are very narrow.



27. A shoe according to claim 1, wherein at least one of said indentations is approximately 1-2 millimeters in width.

28. A shoe according to claim 1, wherein at least some of said indentations are closely spaced.

29. A shoe according to claim 1, wherein at least two of said indentations are separated from each other by no more than approximately 2 millimeters.

30. A shoe comprising:

- (a) a bottom surface that is adjacent to the ground in normal use and that has a plurality of indentations, with ground-contacting portions between the indentations;
- (b) a sole that forms at least a portion of the bottom surface;
- (c) an upper portion extending above the sole; and
- (d) a plurality of small particles bonded differentially to different areas of the bottom surface, with each of a plurality of the ground-contacting portions being coated more than each of the plurality of indentations.

31. A shoe according to claim 30, wherein the small particles are bonded to the different areas of the bottom surface using adhesive material.

32. A shoe according to claim 30, wherein the small particles are bonded to the different areas of the bottom surface by embedding the small particles directly into said different areas using at least one of heat and pressure.

33. A shoe according to claim 30, wherein the small particles are bonded to the different areas of the bottom surface using a backing sheet material.

34. A shoe according to claim 30, wherein the small particles comprise a fabric material.

35. A shoe according to claim 34, wherein the fabric particles have been applied using a flocking technique.

36. A shoe according to claim 30, wherein the indentations ordinarily do not contact the ground in normal use.

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**EVIDENCE APPENDIX**

None

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**RELATED PROCEEDINGS APPENDIX**

None